

TI-29189

In the specification:

On page 12 beginning with the paragraph on line 5 and ending with line 18 amend the specification as follows:

Register copying is depicted in Fig. 6. In step S1-51, the system determines the set of all registers w may be modified by the current instruction and live out of the WHILE loop. Then, the method proceeds to step S2-52.

In step S2-52, the method determines if all registers w have been processed. If so, the method terminates. If not, the method proceeds to step S3-53.

In step S3-53, the method inserts a copy of w to a new register wtmp. This copy is inserted immediately after the current instruction. The copy instruction is guarded by [y]. Note that y is TRUE if and only if the instance of the current instruction being executed is not speculative (i.e., would have been executed in the original instruction stream). However, y need not be known when executing the current instruction. Potentially, evaluation of y can be delayed until near the end of the current iteration, thereby providing additional scheduling flexibility over prediction on some architectures. The method then proceeds to S4-54.

In step S4-54, the method restores w to the value it would have had at the end of the original loop, by copying wtmp to w after the WHILE loop terminates. Then, the method returns to step N4.